0590
1009

#2

OIPE

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/852,000

DATE: 12/04/2001
TIME: 11:26:10

Input Set : A:\So50052u.txt
Output Set: N:\CRF3\11212001\I852000.raw

ENTERED

```
      3 <110> APPLICANT: Osumi, Takashi
      4       Tsukamoto, Toshiro
      5       Tsukamoto, Noriyo
      6       Yamasaki, Masatoshi
      8 <120> TITLE OF INVENTION: GREEN FLUORESCENT PROTEINS AND BLUE FLUORESCENT
      9       PROTEINS
     11 <130> FILE REFERENCE: 046124-5005-US
C--> 13 <140> CURRENT APPLICATION NUMBER: US/09/852,000
C--> 14 <141> CURRENT FILING DATE: 2001-05-10
     16 <150> PRIOR APPLICATION NUMBER: JP 026418/1998
     17 <151> PRIOR FILING DATE: 1998-01-23
     19 <150> PRIOR APPLICATION NUMBER: US 09/121,539
     20 <151> PRIOR FILING DATE: 1998-07-24
     22 <150> PRIOR APPLICATION NUMBER: US 09/615,655
     23 <151> PRIOR FILING DATE: 2000-07-13
     25 <160> NUMBER OF SEQ ID NOS: 14
     27 <170> SOFTWARE: PatentIn Ver. 2.0
     29 <210> SEQ ID NO: 1
     30 <211> LENGTH: 238
     31 <212> TYPE: PRT
     32 <213> ORGANISM: Aequorea victoria
     34 <220> FEATURE:
     35 <223> OTHER INFORMATION: Green fluorescent protein
     37 <400> SEQUENCE: 1
     38 Met Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu Val
     39  1               5                  10                  15
     41 Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly Glu
     42             20                  25                  30
     44 Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile Cys
     45         35                  40                  45
     47 Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr Phe
     48     50                  55                  60
     50 Ser Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys Gln
     51 65                  70                  75                  80
     53 His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu Arg
     54                 85                  90                  95
     56 Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu Val
     57             100                 105                 110
     59 Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly Ile
     60         115                 120                 125
     62 Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr Asn
     63     130                 135                 140
     65 Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn Gly
     66 145                 150                 155                 160
     68 Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser Val
     69                 165                 170                 175
     71 Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly Pro
```

RAW SEQUENCE LISTING DATE: 12/04/2001
PATENT APPLICATION: US/09/852,000 TIME: 11:26:10

Input Set : A:\So50052u.txt
Output Set: N:\CRF3\11212001\I852000.raw

```
72              180                 185                 190
74 Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu Ser
75          195                 200                 205
77 Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe Val
78      210                 215                 220
80 Thr Ala Ala Gly Ile Thr His Gly Met Asp Glu Leu Tyr Lys
81 225                 230                 235
84 <210> SEQ ID NO: 2
85 <211> LENGTH: 28
86 <212> TYPE: DNA
87 <213> ORGANISM: Artificial Sequence
89 <220> FEATURE:
90 <223> OTHER INFORMATION: Description of Artificial Sequence: cloning primer
92 <400> SEQUENCE: 2
93 tcgtgaccac cttctcccac ggcgtgca                                        28
96 <210> SEQ ID NO: 3
97 <211> LENGTH: 28
98 <212> TYPE: DNA
99 <213> ORGANISM: Artificial Sequence
101 <220> FEATURE:
102 <223> OTHER INFORMATION: Description of Artificial Sequence: cloning primer
104 <400> SEQUENCE: 3
105 tgcacgccgt gggagaaggt ggtcacga                                        28
108 <210> SEQ ID NO: 4
109 <211> LENGTH: 29
110 <212> TYPE: DNA
111 <213> ORGANISM: Artificial Sequence
113 <220> FEATURE:
114 <223> OTHER INFORMATION: Description of Artificial Sequence: cloning primer
116 <400> SEQUENCE: 4
117 gctggagtac aacttcaaca gccacaacg                                       29
120 <210> SEQ ID NO: 5
121 <211> LENGTH: 29
122 <212> TYPE: DNA
123 <213> ORGANISM: Artificial Sequence
125 <220> FEATURE:
126 <223> OTHER INFORMATION: Description of Artificial Sequence: cloning primer
128 <400> SEQUENCE: 5
129 cgttgtggct gttgaagttg tactccagc                                       29
132 <210> SEQ ID NO: 6
133 <211> LENGTH: 28
134 <212> TYPE: DNA
135 <213> ORGANISM: Artificial Sequence
137 <220> FEATURE:
138 <223> OTHER INFORMATION: Description of Artificial Sequence: cloning primer
140 <400> SEQUENCE: 6
141 cctcgtgacc accctctccc acggcgtg                                        28
144 <210> SEQ ID NO: 7
145 <211> LENGTH: 28
```

RAW SEQUENCE LISTING
PATENT APPLICATION: US/09/852,000

DATE: 12/04/2001
TIME: 11:26:10

Input Set : A:\So50052u.txt
Output Set: N:\CRF3\11212001\I852000.raw

146 <212> TYPE: DNA
147 <213> ORGANISM: Artificial Sequence
149 <220> FEATURE:
150 <223> OTHER INFORMATION: Description of Artificial Sequence: cloning primer
152 <400> SEQUENCE: 7
153 cacgccgtgg gagagggtgg tcacgagg 28
156 <210> SEQ ID NO: 8
157 <211> LENGTH: 28
158 <212> TYPE: DNA
159 <213> ORGANISM: Artificial Sequence
161 <220> FEATURE:
162 <223> OTHER INFORMATION: Description of Artificial Sequence: cloning primer
164 <400> SEQUENCE: 8
165 cctcgtgacc accctcacct acggcgtg 28
168 <210> SEQ ID NO: 9
169 <211> LENGTH: 28
170 <212> TYPE: DNA
171 <213> ORGANISM: Artificial Sequence
173 <220> FEATURE:
174 <223> OTHER INFORMATION: Description of Artificial Sequence: cloning primer
176 <400> SEQUENCE: 9
177 cacgccgtag gtgagggtgg tcacgagg 28
180 <210> SEQ ID NO: 10
181 <211> LENGTH: 29
182 <212> TYPE: DNA
183 <213> ORGANISM: Artificial Sequence
185 <220> FEATURE:
186 <223> OTHER INFORMATION: Description of Artificial Sequence: cloning primer
188 <400> SEQUENCE: 10
189 gaacggcatc aaggccaact tcaagatcc 29
192 <210> SEQ ID NO: 11
193 <211> LENGTH: 29
194 <212> TYPE: DNA
195 <213> ORGANISM: Artificial Sequence
197 <220> FEATURE:
198 <223> OTHER INFORMATION: Description of Artificial Sequence: cloning primer
200 <400> SEQUENCE: 11
201 ggatcttgaa gttggccttg atgccgttc 29
204 <210> SEQ ID NO: 12
205 <211> LENGTH: 28
206 <212> TYPE: DNA
207 <213> ORGANISM: Artificial Sequence
209 <220> FEATURE:
210 <223> OTHER INFORMATION: Description of Artificial Sequence: cloning primer
212 <400> SEQUENCE: 12
213 catcgaggac ggcggcgtgc agctcgcc 28
216 <210> SEQ ID NO: 13
217 <211> LENGTH: 28
218 <212> TYPE: DNA

RAW SEQUENCE LISTING DATE: 12/04/2001
PATENT APPLICATION: US/09/852,000 TIME: 11:26:10

Input Set : A:\So50052u.txt
Output Set: N:\CRF3\11212001\I852000.raw

<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Description of Artificial Sequence: cloning primer
<400> SEQUENCE: 13
ggcgagctgc acgccgccgt cctcgatg 28
<210> SEQ ID NO: 14
<211> LENGTH: 239
<212> TYPE: PRT
<213> ORGANISM: Artificial Sequence
<220> FEATURE:
<223> OTHER INFORMATION: Description of Artificial Sequence: Engineered green fluorescent protein
<400> SEQUENCE: 14

```
Met Val Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu
 1               5                  10                  15
Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly
            20                  25                  30
Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile
        35                  40                  45
Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr
    50                  55                  60
Phe Thr Tyr Gly Val Gln Cys Phe Ser Arg Tyr Pro Asp His Met Lys
65                  70                  75                  80
Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu
                85                  90                  95
Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu
            100                 105                 110
Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly
        115                 120                 125
Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr
    130                 135                 140
Asn Tyr Asn Ser His Asn Val Tyr Ile Met Ala Asp Lys Gln Lys Asn
145                 150                 155                 160
Gly Ile Lys Val Asn Phe Lys Ile Arg His Asn Ile Glu Asp Gly Ser
                165                 170                 175
Val Gln Leu Ala Asp His Tyr Gln Gln Asn Thr Pro Ile Gly Asp Gly
            180                 185                 190
Pro Val Leu Leu Pro Asp Asn His Tyr Leu Ser Thr Gln Ser Ala Leu
        195                 200                 205
Ser Lys Asp Pro Asn Glu Lys Arg Asp His Met Val Leu Leu Glu Phe
    210                 215                 220
Val Thr Ala Ala Gly Ile Thr Leu Gly Met Asp Glu Leu Tyr Lys
225                 230                 235
```

VERIFICATION SUMMARY
PATENT APPLICATION: US/09/852,000

DATE: 12/04/2001
TIME: 11:26:11

Input Set : A:\So50052u.txt
Output Set: N:\CRF3\11212001\I852000.raw

L:13 M:270 C: Current Application Number differs, Replaced Application Number
L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date